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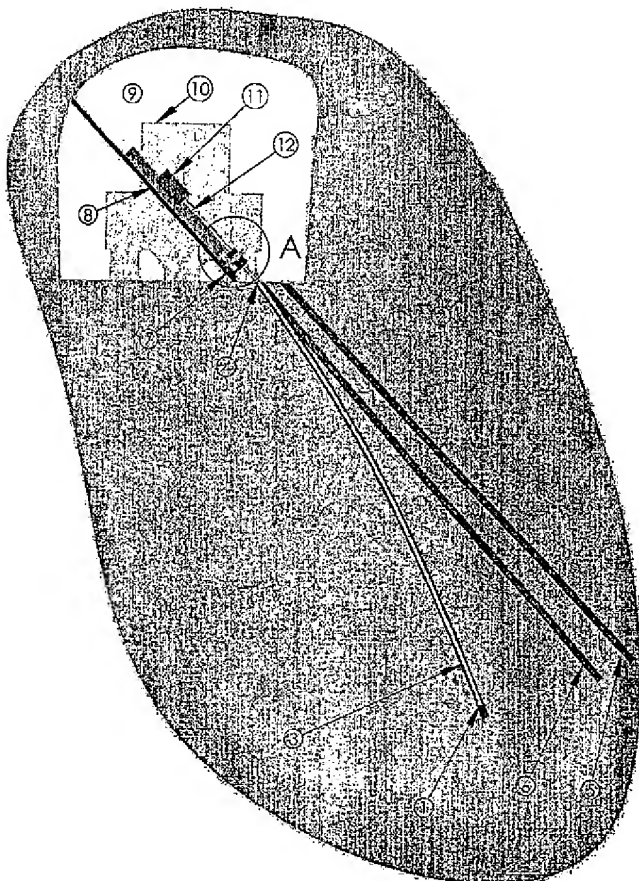
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- (54) Title: AUTOMATED DRILL STRING POSITION SURVEY



- (57) Abstract:** A method of surveying drill holes, typically for use in underground mining situations where the holes are bored using a top hammer drill rig (10), utilises a survey tool located adjacent the drill bit (1) which is used to log position readings as the drill string is withdrawn from the hole after the drilling operation. In this manner, it is possible to log the actual hole bored by the drill string (3) in real time as the drilling operation proceeds, and show deviation from intended hole positions (5) or (6). The survey tool typically includes an inertial survey package, a power source, and a data logger with the survey package selected from the group comprising commercially known inertial known survey packages, for superior characteristics of resistance to vibration and impact. The survey tool is maintained in a sleeping mode while drilling is undertaken, and activated to provide position data as the drill string is progressively withdrawn from the actual hole path (3).



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